XIII. ON SOME SPECIES OF RHAMDIA, A GENUS OF SOUTH AMERICAN SILURIDÆ, IN THE CARNEGIE MUSEUM.¹

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(PLATE XXXVIII.)

Genus RHAMDIA Bleeker.

1. Rhamdia pentlandi (Cuvier & Valenciennes).

7280*a-j*, C. M., 51-105 mm., Rio Perené at its source. 1909. Lola Vance.

Adipose 4-4.5; maxillary barbel to, or nearly to, origin of anal. D. 1.6; A. 12-15; pectoral spine a little longer than the snout, the outer hooks much the stronger.

2. Rhamdia sapo (Valenciennes).

7285a-c, C. M., Porto Alegre, July 19, 1909. J. D. Haseman.

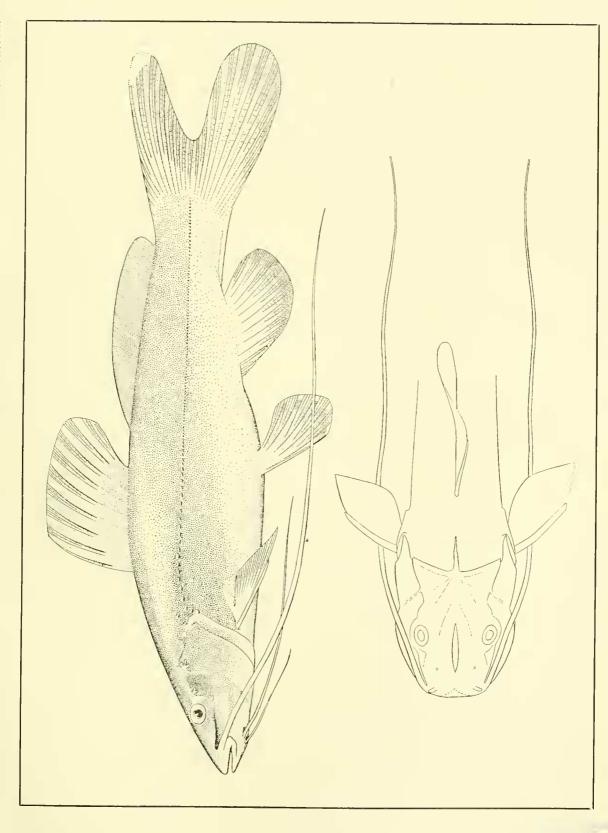
Dorsal 1.7 in two specimens, 1.8 in one; eye 6-6.5; interorbital 5.4 in the head in the smallest, 3.5 in the largest specimen. The maxillary barbel reaches to near the end of the adipose in the smallest, to the adipose in the middle-sized specimen, and a little further in the largest. The premaxillary teeth are 5.5 times as wide as deep.

3. Rhamdia microps sp. nov. (Plate XXVIII.)

7283a-d, C. M., 111-175 mm., Uruguayana, Feb. 7, 1909. Haseman.

The largest specimen is the type. Head 3.4-3.5; depth 4.5-5. D. 1, 7 in one, 1, 8 in three. A. 11-13. Eye six times in the length of the head in the smallest, seven and one-half times in the largest; interorbital three and one-half in the smallest, three in the largest; maxillary barbel reaching beyond base of middle caudal rays on one side of the smallest, to or beyond base of adipose in the largest; adipose fin a little over three times in the length; pectoral spine equals snout and eye in the largest example; dorsal spine three and one-half times in the length of the head in the largest. Pores of the head prominent

¹ Contribution from the Zoölogical Laboratory of Indiana University No. 148.



Rhamdia microps Eigenmann. Type. C. M. No. 7283. $\times \frac{4}{5}$.



even in the smallest; in clusters in the largest; depth of intermaxillary band of teeth nine times in its width. A well-marked hyaline band on the dorsal. Color plain, shading downward.

4. Rhamdia hilarii (Cuvier & Valenciennes).

7277a-j, C. M., 61-187 mm., Rio Das Velhas, May 10, 13, 1908. Haseman.

Dorsal spines, I, 7 in seven and I, 8 in three specimens. Maxillary barbel extending to near the middle of the adipose in the smallest, to the second sixth of the adipose in the largest, not quite to end of dorsal in some of the others; pores of the top of the head conspicuous, aggregated; depth of premaxillary band of teeth about seven to eight times in its width; eye 5.5-6 times in the head, interorbital 4-4.5. A. II-I2.

7282a-b, C. M., 140-191 mm., Piracicaba, Sept. 7, 1908. Haseman.

In the depth of the premaxillary band of teeth these two specimens approach $R. \, sapo$. D. I, 7; I, 8; maxillary barbel not quite to end of base of dorsal; interorbital 3.4–3.5; premaxillary band of teeth $4\frac{1}{2}$ and 6 (in smaller) times as wide as deep. Eye 6–6.5 in the head; pectoral spine $2\frac{1}{3}$.

From other localities in the basin of the upper Paraná, Rios Tieté and Grande and their tributaries there are the following:

- 7276a-b, C. M., 105-137 mm., Salto Avanhandava, Rio Tieté, Sept. 14, 1908. Haseman.
- 7289a-e, C. M., 72-125 mm., Sapina, Rio Tieté, Dec. 7, 1908. Haseman.
- 7287a, C. M., 246 mm., Jaguara, Rio Grande into Paraná. Haseman. 7311a, C. M., 61 mm., Mogy Guassú, into Rio Grande into Paraná, Aug. 25, 1908. Haseman.
- 7275*a*-*b*, C. M., 79-108 mm., Bebedoura, near Rio Grande, Sept. 1, 1908. Haseman.

In these specimens from the upper Parana basin, Rio Tieté, Rio Grande, and their tributaries, the dorsal formula is I, 6 in two (from Sapina); I, 7 in four; I, 8 in three. The maxillary barbel may reach to the middle of the adipose, usually it is shorter, sometimes not quite reaching to end of the base of the dorsal.